

DERWENT- 2000-100175
ACC-NO:

DERWENT- 200239
WEEK:

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TITLE: Moisture absorbing and desorbing polymer useful in, e.g.
fabric, has cross-linked structure, macropores of specific
size and specified number of carboxyl groups

INVENTOR: NISHIDA, R

PATENT-ASSIGNEE: JAPAN EXLAN CO LTD[JAPE] , NISHIDA R[NISHI]

PRIORITY-DATA: 1998JP-0202693 (July 1, 1998)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
GB 2339198 A	January 19, 2000	N/A	050	C08J 009/28
US 6387970 B1	May 14, 2002	N/A	000	C08J 009/28
DE 19928844 A1	January 5, 2000	N/A	000	C08L 033/20
JP 2000017101 A	January 18, 2000	N/A	012	C08J 009/28
US 6080797 A	June 27, 2000	N/A	000	C09J 009/28
GB 2339198 B	November 14, 2001	N/A	000	C08J 009/28

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
GB 2339198A	N/A	1999GB-0013208	June 7, 1999
US 6387970B1	Div ex	1999US-0322407	May 28, 1999
US 6387970B1	N/A	2000US-0503771	February 14, 2000
DE 19928844A1	N/A	1999DE-1028844	June 24, 1999
JP2000017101A	N/A	1998JP-0202693	July 1, 1998
US 6080797A	N/A	1999US-0322407	May 28, 1999
GB 2339198B	N/A	1999GB-0013208	June 7, 1999

INT-CL B01J020/26, C08F002/04 , C08F008/00 , C08F020/44 ,
(IPC): C08J009/28 , C08L033/20 , C09J009/28

ABSTRACTED-PUB-NO: GB 2339198A

BASIC-ABSTRACT:

NOVELTY - A porous organic moisture absorbing and desorbing polymer has a cross-linking structure, macropores with an average pore size of 0.005-1 microns that cover at least 1 m²/g of the specific surface area of the polymer, and comprises 2-12 meq/g of carboxylate salt groups.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for the manufacture of the claimed polymer by coagulating, in a solvent which is a non-solvent for the polymer, a polymer solution prepared from an acrylonitrile polymer and a solvent, to give a porous acrylonitrile polymer. Crosslinks are introduced in the polymer by reaction with a hydrazine compound, and hydrolysis of the residual nitrile group introduces 2-12 meq/g of carboxylate salts into the resulting polymer, which has macropores that cover at least 1m²/g of the polymer's specific surface area and have an average pore size of 0.005-1 micron.

USE - In fibers, processed fibers, non-woven fabric, film, binders, paints, adhesives, sensors, resins and electrical and electronic components.

ADVANTAGE - The polymer has good moisture absorbing and desorbing properties in a short period of time and has good moisture absorbing and desorbing rates which have not been available until now.

ABSTRACTED-PUB-NO: GB 2339198B

EQUIVALENT-ABSTRACTS:

NOVELTY - A porous organic moisture absorbing and desorbing polymer has a cross-linking structure, macropores with an average pore size of 0.005-1 microns that cover at least 1 m²/g of the specific surface area of the polymer, and comprises 2-12 meq/g of carboxylate salt groups.

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US 6080797A

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US 6387970B

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CHOSEN- Dwg.0/0
DRAWING:

TITLE- MOIST ABSORB DESORB POLYMER USEFUL FABRIC CROSS LINK
TERMS: STRUCTURE MACROPOROUS SPECIFIC SIZE SPECIFIED NUMBER
CARBOXYL GROUP

DERWENT-CLASS: A14 F01 G02 G03

CPI-CODES: A01-D04; F03-C05; G02-A02C4; G03-B02D1; G03-B04;

ENHANCED- Polymer Index [1.1] 018 ; R00817 G0475 G0260 G0022 D01
POLYMER- D12 D10 D26 D51 D53 D58 D83 F12 ; R00642 G0340 G0339
INDEXING: G0260 G0022 D01 D11 D10 D12 D26 D51 D53 D58 D63 D84 F41
F89 ; L9999 L2528 L2506 ; L9999 L2664 L2506 ; L9999
L2313 ; L9999 L2835 ; H0022 H0011 ; L9999 L2391 ; L9999
L2073 ; M9999 M2073 ; S9999 S1616 S1605 ; S9999 S1285*R ;
S9999 S1070*R ; S9999 S1183 S1161 S1070 ; P0088

Polymer Index [1.2] 018 ; ND01 ; ND07 ; Q9999 Q6791 ;
Q9999 Q7169 Q7158 Q7114 ; Q9999 Q6644*R ; Q9999 Q7874 ;
Q9999 Q7330*R ; N9999 N6439 ; N9999 N5889*R ; N9999
N6177*R ; N9999 N6633 N6611 ; N9999 N6699 N6655 ; N9999
N5812*R ; K9370 ; B9999 B4988*R B4977 B4740 ; B9999 B5209
B5185 B4740 ; B9999 B5221 B4740 ; B9999 B3407 B3383
B3372 ; K9518 K9483 ; K9687 K9676 ; K9676*R ; K9712
K9676 ; K9416

Polymer Index [1.3] 018 ; R03252 D00 F16 F48 F60 H* N* 5A
O* 6A S* ; C999 C102 C000 ; C999 C293

Polymer Index [1.4] 018 ; R01740 G2335 D00 F20 H* O* 6A ;
A999 A475

Polymer Index [1.5] 018 ; D01 F11 ; A999 A157*R

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C2000-029274